

## ENTOMOLOGICAL ITEMS.

DR. A. GESTRO, whose address is at the Museo Civico, Genoa, Italy, would like a correspondent with whom he could exchange coleoptera of Italy, New Guinea, and the Malay archipelago, for those of North America.

HERR LEHRER FRANZ BUZEK, in Rakowitz, Hungarian Austria, desires to exchange coleoptera and lepidoptera of his own locality for those of North America. Address as above given.

ASSISTANT WANTED.—Dr. C. V. Riley is looking for some one experienced in collecting and mounting insects, to assist in the work of the Division of Entomology at the Department of Agriculture in Washington. Salary according to ability. Applicants may address him at the Department.

SOUTH AMERICAN INSECTS FOR SALE.—M. Louisa Ross, Hyde Park, N. Y., offers for sale a 15-drawer cabinet containing ten drawers of butterflies, one of moths, one of more than 200 beetles, and one variety drawer, all South American; one of moths and one of butterflies, both North American; systematically arranged. Price, \$500, which is stated to be very much below cost. The beetles will be sold for \$60, if bought separately or with the most rare of the butterflies. The other specimens may be sold by the drawer. The collection is at the Cooper Institute, New York City, where it can be seen.

STAPHYLINIDAE OF BUENOS AIRES.—Mr. Félix Lynch Arribáizaga has just completed a paper, entitled "Estafilinos de Buenos Aires," which occupies the first 392 pages of vol. 7 of the Boletín de la Academia nacional de ciencias en Córdoba, and which is an important contribution to the coleopterous fauna of the Argentine Republic. The author gives descriptions and notes upon 118 species (belonging to 58 genera) which are found in the province of Buenos Aires. A few of the species are North American.

ENTOMOLOGICAL CLUB OF A. A. A. S.—The next meeting of the American association for the advancement of the science will be held at Ann Arbor, Mich., commencing Aug. 26th 1885. The Entomological club will meet at that place on August 25th 1885, according to its by-laws; exact locality not yet determined.

Will those members of the club or other entomologists who expect to be present please notify one of the undersigned, and also send in the title of any papers they expect to read, and state the length of time they expect to occupy, so that a program can be arranged? The exact place and hour of meeting, as well as the program so far as fixed, will be published later.

John B. Smith, Brooklyn, N. Y., *Chairman*.  
Herbert Osborn, Ames, Iowa.  
B. Pickman Mann, Washington, D. C.  
*Committee.*

DATA ON ANNUAL ADDRESSES. The earlier annual addresses of the retiring presidents of the Cambridge entomological club, of which we publish in this numero that for 1885, were as follows:—

1st annual address, by S: H. Scudder, Jan. 1878. [See PSYCHE, Jan.-Feb. (14 June) 1878, v. 2, p. 97-116 (Rec., 1401).]

2nd, by E: P. Austin, 10 Jan. 1879. [See PSYCHE, 1879, v. 2: (14) Mar., p. 217-223; (11) Apr., p. 227-228 (Rec., 1434).]

3rd, by E: Burgess, 9 Jan. 1880. [See PSYCHE, Mar. (1 May) 1880, v. 3, p. 27-43 (Rec., 2943).]

4th, by E: Burgess, 14 Jan. 1881. [Not published; see PSYCHE, Jul.-Sep. 1881 (7 Mar. 1882), v. 3, p. 245 (Rec., 2950).]

5th, by E: L. Mark, 13 Jan. 1882. [Not published.]

6th, by S: H. Scudder, 12 Jan. 1883. [Not published; see PSYCHE, Jan.-Feb. (5 May) 1883, v. 4, p. 13.]

7th, by B: P. Mann, 11 Jan. 1884. [See PSYCHE, Apr. (14 June) 1884, v. 4, p. 155-159.]

**PRESERVATION OF INSECTS.**—To remove the verdigris which forms upon the pins the pinned insects should be immersed in benzine and left there for a time; several hours is generally long enough. The administration of this bath cannot be too highly recommended for beetles which have been rendered unrecognizable by grease, especially when dust has been mixed with the grease. This immersion, of variable duration according to circumstances, will restore to these insects, however had they have become, all their brilliancy and all their first freshness, and the efflorescences of cupric oxide will not reappear. This preventative and curative method is also readily applicable to beetles glued upon paper which have become greasy: plunge them into benzine in the same way, and as gum is insoluble in the liquid, they remain fastened to their supports. Pruinose beetles, which are few in number, are the only ones that the benzine bath can alter; the others which are glabrous, pubescent, or scaly, can only gain by the process, and they will always make a good show in the collection . . .—A. Duhois in *Feuille des jeunes naturalistes*, March 1885, p. 71.

**NECROLOGY.** Since our last issue announcements of the deaths of the following entomologists have come to our notice: Constant Bar, entomologist at Cayenne, French Guiana, died there in 1884. Professor Lauritz Esmark, director of the zoological museum of the university of Christiania, died there in Dec. 1884. George Mawson, an English lepidopterist, died 10 Nov. 1884. L. Rudolf Meyer-Dür, who has published articles upon entomology since 1841, died 2 March 1885, at Zürich, Switzerland, aged 73. Louis Auguste Remacle Mors, a Parisian entomologist and civil engineer, died at Paris, 7 Dec. 1884, at the age of 58 years. Major Frederic J. Sidney Parry, a London coleopterist, died 1 Feb. 1885, at The Warren, Bushey Heath, aged 74. Titian Ramsay Peale, lepidopterist, born Oct. 1799, died 13 March 1885, in Philadelphia, Pa. Ed-

ward Caldwell Rye, a well-known English coleopterist, and editor of the *Zoological record*, born in London 10 April 1832, died of the small-pox, in the same city, 7 Feb. 1885. Sidney Smith, entomologist and conchologist, died at Walmer, England, 28 Dec. 1884, aged nearly 80 years. Friedrich Stein, professor in the university of Prague, who was born in 1818 in Niemeck, Prussia, died 9 Jan. 1885 in Prague; Dr. Stein was a well-known writer upon infusoria, and in earlier life the author of a number of entomological papers, among which the most prominent was one upon the sexual organs and the structure of the abdomen of female beetles, with nine large plates, published in 1847. The January (1885) numero of *Rovartani lapok* gives a biographical notice, list of publications, and portrait of Dr. O. Tömösváry, whose death we have already noted; he was born 12 Oct. 1852, at Magyaró, Hungary, and died 14 August 1884, at Déva, Hungary.

G: D.

**UPON A PECULIAR ORIENTAL LOCALITY FOR HONEY.\***—Xenophon, in his description of the "Retreat of the ten thousand," says that his soldiers drank barley wine, oion kritys, as it had been introduced into Egypt by Osyris 4000 years previously, according to the Egyptian tradition, to take the place of other spirituous liquors. Sophocles and other writers mention this barley wine also. Xenophon says likewise that his soldiers were in the habit of getting drunk by the use of a certain kind of honey, and were poisoned by it. It seems that the bees suck the nectar from the flowers of poisonous plants which are found in that region. Such an intoxicating, soporific honey is still found there under the name of *Meli menomonon*. I have succeeded by many tedious investigations in establishing the following. I obtained the information principally through a former pupil of mine who is now settled in Kerchasund in Persia as a physician and apothecary.

\* Translated from Prof. Dr. Xaver Landerer's "Mittheilungen aus dem orient" (Deutsch-amer. apotheker-zeitung, 15 Dec 1882, jahrg. 3, p. 582).

I have already reported to you upon the oriental mania for opium. But the opium which is produced for the western countries and for China is very little in comparison with the domestic consumption. In the districts around Erzerum, around Kerchasund and farther into the Persian districts are to be found colossal plantations, whose product is almost exclusively used where produced.

In all probability it is the nectar of these poppy plants which gives the honey in those regions its toxic qualities.

This honey is used as a soporific for children and is employed also against various affections, especially such as arise from improper food—sour milk, badly cooked rice, goat's milk, etc.—as for instance colic, and often is of aid where symptoms of death have already appeared.

The opium which is collected from the poppy plants in those regions contains usually 12 per cent. and rarely less than 10 per cent. of morphium. I had an opportunity to see such opium in the possession of a Persian merchant. It consisted of round balls of a few drachms weight which were wrapped in goldleaf. This is the kind which is used principally for smoking and chewing.

PUPAL RETREAT OF CHARAGIA VIRESCENS.—Mr. G: Vernon Hudson, in an article in the *Entomologist* for February 1885, entitled "Life-history of *Charagia virescens*," gives some interesting observations in regard to the habits of this bombycid from New Zealand. The larva bores in the wood of living trees, often in that of *Aristotelia racemosa* (New Zealand currant), *Olea apetala* (black maize) and *Leptospermum* (manuka). When ready to pupate the larva constructs a complicate tunnel, described as follows. "It consists of a spacious, irregular, but shallow, cavity just under the bark, having a large opening to the air, which is entirely closed with a thin silken covering almost exactly the same shape and size as the numerous scars which occur at intervals up the trunks of nearly all the trees. Three large tunnels

open into this shallow cavity; one in the centre, which runs into the middle of the stem; and one on each side, which run right and left just under the bark. These are usually very short, but sometimes extend half-way round the tree, and occasionally even join one another on the opposite side. The central tunnel has a slightly upward direction for a short distance inwards, which effectually prevents it from becoming flooded with water; afterwards it pursues an almost horizontal course until it reaches the centre of the tree, when it appears to suddenly terminate. This, however, is not the case, for, if the gallery floor is carefully examined a short distance before its apparent termination, a round trap-door will be found compactly constructed of very hard, smooth silk, corresponding with the surrounding portion of the tunnel so exactly that it almost escapes detection. When this lid is removed a long perpendicular shaft is disclosed, which runs down the middle of the tree to a depth of fourteen or sixteen inches [35-40 cm.], and is about six lines [13 mm.] in diameter; at the bottom of this the elongate *virescens* pupa sleeps quietly and securely in an upright position, the old larval skin forming a soft support for the terminal segment of the pupa to rest on. The upper end of this vertical shaft is lined with silk, which forms a framework on which the trap-door rests when it is closed: the lid itself, being of a larger size than the orifice, which it covers, causes it to be extremely difficult, if not impossible, to open it from the exterior, especially when it fits down very closely, which is nearly always the case as long as the insect remains in its burrow. The object of this most ingenious contrivance is in all probability, to prevent the ingress of insects; blattae, slugs, spiders, and immature 'wetas' (*Hemideina*) are frequently found in both central and lateral tunnels, but they are quite unable to pass the trap-door, and are most likely entirely ignorant of the existence of the vertical burrow."

**METAMORPHOSES OF ARCTIC INSECTS.** In the chapter entitled, "Das Insektenleben in arktischen Ländern," which Dr. Christopher Aurivillius contributes to the account of A. E. Nordenskiöld's arctic investigations, published this year in Leipzig,\* the author says: "The question of the mode of life of insects and of its relation to their environment in the extreme north is one of especial interest. Knowing, as we do, that any insect in the extreme north has at the most not more than from four to six weeks in each year for its development, we wonder how certain species can pass through their whole metamorphosis in so short a period. R. McLachlan adverts, in his work upon the insects of Grinnell Land, to the difficulties which the shortness of the summer appears to put in the way of the development of the insects, and expresses the belief that the metamorphosis which we are accustomed here to see passed through in one summer there requires several summers. The correctness of this supposition has been completely shown by the interesting observations which G. Sandberg has made upon species of lepidoptera in South Varanger, at 69° 40' north latitude. Sandberg succeeded in following the development from the egg onward of some species of the extreme north. *Oenisc bore*, Schn., a purely arctic butterfly, may be taken as an example. This species never has been found outside of arctic regions and even there occurs only in places of purely arctic stamp. It flies from the middle of June onward, and lays its eggs on different species of grass. The eggs hatch the same summer; the larva hibernates under ground, continues eating and growing the next summer, and does not even then reach its full development, but winters a second time and pupates the following spring. The pupa, which in closely-related forms, in regions further to the south,

is suspended free in the air upon a blade of grass or like object, is in this case made in the ground, which must be a very advantageous habit in so raw a climate. The imago leaves the pupa after from five to six weeks, an uncommonly long period for a butterfly. In more southern regions the butterfly pupa rests not more than fourteen days in summer. The entire development, then, takes place much more slowly than it does in regions further south. Sandberg has shown, then, by this and other observations, that the arctic summer, even at 70° N., is not sufficient for the development of many butterflies, but that they make use of two or more summers for it. If then more than one summer is requisite for the metamorphosis of the butterflies, it appears to me still more likely that the humble-bees need more than one summer for their metamorphosis. With us only the developed female lives over from one year to the next; in spring she builds the new nest, lays eggs, and rears the larvae which develop into workers who immediately begin to help in the support of the family; finally, toward autumn, males and females are developed. It seems scarcely credible that all this can take place each summer in the same way in Grinnell Land, at 82° N., especially as the access to food must be more limited than it is with us. The development of the humble-bee colony must surely be quite different there. If it was not surely proved that humble-bees occur at so high latitudes, one would not, with a knowledge of their mode of life, be inclined to believe that they could live under such conditions. They seem, however, to have one advantage over their relatives in the south. In the arctic regions none of those parasites are found which in other regions lessen their numbers, such as the *conofidus* among the flies, the mutillas among the hymenoptera, and others."

\* NORDENSKIÖLD, A. E. Studien und forschungen veranlasst durch meine reisen im hohen norden. Autorisirte ausgabe. Leipzig, Brockhaus, 1885. 9 + 521 p., 8 pl., maps, O. il.